



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,878	08/06/2003	Ronald P. Doyle	RSW920030084US1 (100)	9083
46320 7590 06/14/2007 CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG 950 PENINSULA CORPORATE CIRCLE SUITE 3020 BOCA RATON, FL 33487				
			EXAMINER BIAGINI, CHRISTOPHER D	
			ART UNIT 2142	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/635,878	Applicant(s) DOYLE ET AL.	
	Examiner Christopher D. Biagini	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/6/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed Aug. 6, 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because no date of publication is listed for the references: *Autonomic computing concepts*, *IBM Tivoli enterprise Solution*, and Dynamic IT Proactive Resource Management Software from ProvisionSoft.
2. The information disclosure statement has been placed in the application file, but the references listed above have not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Drawings

3. The drawings are objected to because Figs. 1-3B appear to have been submitted in triplicate.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

Art Unit: 2142

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure and claims 2, 6, and 11 are objected to because of the following informalities: The word "hysteresis" is misspelled as "hysterisis" several times.

6. Claims 1 and 2 are objected to because of the following informalities: the phrase "said manual and autonomic management process" (on lines 10 and 3, respectively) appears to be an inadvertent typographical error, and likely was intended to read "said manual and autonomic management processes." For the purposes of this action, this will be assumed to be the case.

7. Claims 4 and 9 are objected to because of the following informalities: the phrase "does not comports" on lines 11 and 12, respectively, appears to be an inadvertent typographical error.

8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. As to claims 1 and 3, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "autonomic" in claims 1 and 3 is used by the claims to mean "without the manual intervention of a human operator", while the accepted meaning is "related to the portion of the vertebrate nervous system that governs involuntary actions." The term is indefinite because the specification does not clearly redefine the term.

4. For the purposes of this action, the term "autonomic" will be interpreted to mean "without the manual intervention of a human operator."

Art Unit: 2142

5. Additionally, note that although claims 4 and 11 also use the term "autonomic" to describe the invention, the claims meet the requirements of 35 U.S.C. 112, second paragraph because the terms appear only in the preamble and, accordingly, have not been given patentable weight.

9. As to claim 2, the claim recites the limitation "said point count" on line 4. There is insufficient antecedent basis for this limitation.

10. As to claims 2, 6, and 11, the phrases "to prevent a hysteresis condition" and "to avoid a hysteresis condition" are unclear. The most relevant definition of the term "hysteresis" is "a property of a system that reacts slowly to an input and whose state is dependent on its immediate history." In the current context, hysteresis applied to a transition dependent on a threshold would require that the indicator exceed the threshold for a certain period of time, for example, in order for the transition to occur. Therefore, applying a smoothing function (which would dampen changes to the indicator and cause the system to respond more slowly) is contrary to the goal of *preventing* hysteresis. Further, Applicant's specification describes both *applying* hysteresis (in the last sentence of paragraph [0009]) and *preventing* hysteresis (paragraph [0024]).

11. As described above, where Applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so

Art Unit: 2142

redefine that claim term. Applicant's intent regarding claims 2, 6, and 11 is unclear since the specification does not clearly redefine the term "hysteresis."

12. As to claims 4 and 9, the phrase "responsive to a further determination that said outcome...comports with said predicted outcome" (emphasis added), which appears twice in both claims, is unclear.

13. It is not clear whether "a further determination" is intended to refer to the step of "further determining whether an outcome from said course of action comports with a predicted outcome." Applicant's specification (specifically, Fig. 3A and paragraph [0020]) indicates that this is likely the case. That is, it appears the claim is intended to require that the changing of the point count occurs responsive to the further determination that said outcome comports with said predicted outcome, where said further determination itself occurs responsive to determining whether a recommended course of action has been performed by an administrator.

14. The claims will be treated as such for the remainder of this Action. That is, the limitation "a further determination" will be interpreted to refer to the step of "further determining whether an outcome from said course of action comports with a predicted outcome."

15. Any claim not specifically addressed above is rejected as incorporating the deficiencies of a parent claim upon which it depends.

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

18. The system of claims 1-3 is directed towards processes, data structures, and functions, which appear to consist entirely of computer software *per se*. Computer software *per se*, in the absence of a structurally and functionally interrelated computer-readable medium, is not statutory subject matter. See MPEP § 2106.01.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

20. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Herz et al. (US Pat. No. 5,754,939, hereinafter "Herz").

21. As to claim 1, Herz shows a system comprising:

a. a manual management process (comprising the process which asks the user for confirmation of an action: see col. 62, lines 61-65) and an autonomic

Art Unit: 2142

management process (comprising the process which automatically chooses the most appropriate action: see col. 2, lines 55-56), each of said manual and autonomic processes having a configuration for recommending courses of action responsive to monitoring the operation of a managed system (the managed system comprising an email system: see col. 61, line 65 to col. 62, line 3);

b. a data structure (comprising an appropriateness function) coupled to said manual and autonomic management processes and configured for storing an indicator reflecting a level of trust of decision making by said manual and autonomic management processes (comprising a level of appropriateness which indicates the trust or confidence a user has in the system's recommended action: see col. 62, lines 3-7 and 17-21); and

c. a transition process coupled to said data structure and programmed to empower a selected one of said manual and autonomic management processes to manage said managed system based upon said data structure containing an indicator which exceeds a threshold level (comprising the process which selects whether or not to prompt the user for confirmation of an action: see col. 62, lines 61-65).

22. Note that the preamble of this claim has not been given patentable weight.

23. As to claim 3, Herz shows the limitations of claim 1 as applied above, and further shows wherein said manual management process comprises a predictive level of

Art Unit: 2142

autonomic management and said autonomic management process comprises an adaptive level of autonomic management.

24. As described in paragraph [0006] of the instant application, predictive levels of management can "provide advice as to the nature of the course of action which the administrator ought to take," which Herz describes as part of the cited manual management process on col. 62, lines 61-65 and col. 62, lines 20-26.

25. Also as described in paragraph [0006] of the instant application, adaptive levels of management "can automatically perform appropriate actions responsive to the information collected by the system and the knowledge of the state of the system," which Herz describes as part of the cited autonomic management system of col. 62, lines 55-56 and col. 63, lines 20-26.

Allowable Subject Matter

26. Claims 4-13 would be allowable if rewritten or amended to overcome the objections and rejections under 35 U.S.C. 112, second paragraph set forth in this Office action.

27. The primary reason for the allowance of the claims is the inclusion of the limitations:

- d. determining whether said recommended course of action has been performed by an administrator and responsive to said determination, further determining whether an outcome from said course of action comports with a predicted outcome;

e. changing a point count responsive to a further determination that an outcome from a course of action comports with said predicted outcome, and oppositely changing said point count responsive to a further determination that an outcome from a course of action does not comport with said predicted outcome,

28. which together are not taught or suggested by the prior art references. Note that, as described above, "a further determination" has been interpreted to refer to the step of "further determining."

29. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

30. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

31. Lewis (US Pat. No. 5,636,344) shows a network management system that can either act as an advisor to a network administrator or operate autonomously.

32. Garnett et al. (US Pat. No. 6,856,942) shows a network management system that, upon diagnosing a fault condition, can make recommendations to an administrator or correct the problem automatically.

33. Di Palma et al. (US Pat. No. 2006/0080014) shows a data processing system whose degree of autonomy can be varied according to the level of trust a user has in

the system. Note that the Di Palma application and the instant application are commonly assigned.

34. Arnold et al. (US Pat. No. 2006/0277591) shows a policy-based computing system whose degree of autonomy can be varied according to the level of trust a user has in the system. Note that the Arnold application and the instant application are commonly assigned.

35. Glitho et al. (US Pat. No. 6,233,449) shows a telecommunications system that predicts the results of recommended actions, and monitors the difference between the actual results and the predicted results.

36. Ballantine et al. (US Pat. No. 6,446,123) shows making recommendations to repair potential faults in a network system.

37. Touboul (US Pat. No. 6,125,390) shows automatically repairing problems with programs on managed systems.

38. Eshghi et al. (US Pat. No. 5,893,083) shows an intelligent computer management system that implements corrective actions in response to the system failing to meet goals.

39. De Oliveira et al. (FR 2774191 A) shows a method of administrating a computer network with the aid of intelligent agents that automatically optimize the operation of the network.

40. Feridun et al. ("ANM: Automated Network Management System") shows a network management system that can automatically diagnose and repair network faults:

41. Cronk et al. ("Rule-Based Expert Systems for Network Management Operations: An Introduction") shows systems that monitor networks and can automatically diagnose and repair faults.
42. Bieszczad et al. ("Mobile Agents for Network Management") shows software agents which can diagnose network faults and either repair them automatically or notify a human operator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on M-R 7:30-5, 7:30-4 alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher D. Biagini
(571) 272-9743



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

May 29, 2007